



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,324	05/18/2005	Mark J. Childs	GE 020201	5728
24737	7590	08/21/2007	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			CHOW, YUK	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2629	
MAIL DATE		DELIVERY MODE		
08/21/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/535,324	CHILDS, MARK J.
	Examiner	Art Unit
	Yuk C. Chow	2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>10/19/2006</u>	6) <input type="checkbox"/> Other: ____

## DETAILED ACTION

### *Oath/Declaration*

1. It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Rosmalen (US 2006/0012708).

As to claim 1, Rosmalen discloses a colour active matrix electroluminescent display device comprising a row and column array of display pixels (Fig. 1(110)), each pixel comprising an electroluminescent display element (Fig. 1(R,B,G) also see [0009]) and a drive transistor ([0032] transistor switches) for driving a current through the display element, the drive transistor and the display element being connected in series between a power line (Fig. 4(41)) for supplying or drawing a controllable current to or from the display element and a common potential line (Fig. 3(34)), wherein each row of display pixels comprises different colour display pixels for producing different colour light outputs, wherein the display pixels of each colour in a row are associated with a

respective and separate power line (Fig. (3(351,352,353)), and wherein the power supply to each power line is individually switchable (Fig. 5(54)) so as to control the duty cycle of the associated display pixels [0032].

As to claim 2, Rosmalen discloses a display device according to claim 1, wherein the power lines (Fig. 5(51,52,53)) associated with the rows of pixels are connected to a power supply (Fig. 5(50)) through a switching arrangement at one end of the rows (see [0051]-[0054]).

As to claim 3, Rosmalen discloses a display device according to claim 2, wherein the power lines associated with a row of pixels (Fig. 5(55)) are connected to at least one power supply rail (Fig. 5(51) through respective switches (Fig. 5(54)) of the switching arrangement (see[0051]-[0054]).

As to claim 4, Rosmalen discloses a display device according to claim 3, wherein the number of power supply rails corresponds to the number of power lines (Fig. 5(51,52,53)) associated with a row of pixels and the power supply rails are shared by all the rows of pixels (see Fig. 5).

As to claim 5, Rosmalen discloses a display device according to claim 3 or claim 4, wherein in each frame period (Fig. 8(Frame N)) each row of pixels is arranged to be addressed in sequence in a respective row address period (Fig. 8(81)) so as to store a drive signal for controlling the operation of the drive transistor of the pixels ([0030] memory device).

As to claim 6, Rosmalen discloses a display device according to claim 5, wherein the switching arrangement (Fig. 5(54)) is operable to connect each of the power lines

associated with a row of pixels to the power supply (Fig. 5(50)) for a predetermined period following addressing which determines the duty cycle of the display pixels associated with the power line, the power lines of each row of pixels being switched in similar manner in sequence (see [0017]-[0020]).

As to claim 7, Rosmalen discloses a display device according to claim 6, wherein the power lines of a row are connected to the power supply for a predetermined period (Fig. 7(73)) that immediately follows the row address period (Fig. 7(72)).

As to claim 8, Rosmalen discloses a display device according to any one of claims 5, 6 and 7 above, wherein each pixel includes a storage capacitor (see [0030] memory device) for storing a gate voltage of the drive transistor and an address transistor for switching a data voltage to the gate of the drive transistor (see [0032] transistor switch) during the row address period, and wherein the switching arrangement (Fig. 5(54)) is operable to disconnect the power lines of a row of pixels from the power supply during the row address period (also see [0049]).

As to claim 9, Rosmalen discloses a display device according to any one of claims 5, 6 or 7, wherein the pixels each include a current sampling circuit (see [0030] monitoring the voltage at a given current) for sampling a drive current during the row address period and a storage capacitor (see [0030] memory device) for storing a gate-source voltage for the drive transistor corresponding to the sampled drive circuit and wherein the switching arrangement (Fig. 5(54)) is operable to connect the power lines associated with a row of pixels to the power supply during the row address period (also see [0049]).

As to claim 10, Rosmalen discloses a display device according to any one of claims 2 to 7 wherein the switching arrangement is fabricated on a substrate of the device carrying the display pixels and power lines (see Fig. 5, although Rosmalen does not explicitly state that switching arrangement is fabricated on a substrate, it is a well known in the art to fabricate active matrix device on a substrate, also it is inherent to place functionally related components near-by or in a group, this simplifies routing and keep the cost of the fabrication down, see [0027]).

As to claim 11, Rosmalen discloses a display device according to any one of the preceding claims, wherein each row of display pixels comprises red, green, and blue pixels (Fig. 5(55), the different colour pixels being connected to respective power lines (Fig. 5(51,52,53)).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuk C. Chow whose telephone number is 571 270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YC  
08/17/2007



AMARE MENGISTU  
SUPERVISORY PATENT EXAMINER